THE BOROUGH OF HANOVER
44 FREDERICK STREET
HANOVER, PENNA. 17331
717-637-3877 FAX 717-637-2805
AN EQUAL OPPORTUNITY BOROUGH

March 16, 2021

INVITATION TO BID

Sealed bids will be solicited by The Borough of Hanover for various estimated quantities of Class 52 Ductile Iron Pipe and Associated Fittings in four (4) inch to twelve (12) inch diameters. All pipe & fittings to be manufactured in the USA. All fittings to include Mag-A-Lug Gland Kits.

Copies of the bidding blank specifications are attached.

Bids will be opened at 10:00 a.m., Monday, April 12, 2021 in the Hanover Borough Council Chamber, 44 Frederick Street, Hanover, Pennsylvania. Bid award will take place at the Hanover Borough Council meeting on Wednesday, April 28, 2021 at 7:00 PM.

All bids must be plainly marked **"DUCTILE IRON PIPE & FITTINGS BID"** and be submitted in sealed envelopes to the Office of the Borough Secretary, 44 Frederick Street, Hanover, Pennsylvania by no later than 10:00 a.m. on the date of opening.

Council reserves the right to reject any or all bids or to award as they deem to be in the best interests of The Borough of Hanover.

NOTE: Purchase orders will be issued as material is needed. All fittings to include Mag-A-Lug Gland Kits.

THE BOROUGH OF HANOVER

Nan Dunford
Borough Manager

dcf
Enclosures

BID FORM

BIDS TO BE OPENED AT 10:00 A.M. MONDAY, APRIL 12, 2021

TO THE HONORABLE MEMBERS OF
HANOVER BOROUGH COUNCIL:

LADIES AND GENTLEMEN:

I/WE, HAVING READ THE BIDDING ANNOUNCEMENT, INSTRUCTIONS TO BIDDERS, AND THE GENERAL AND SPECIAL REQUIREMENTS OF THIS SPECIFICATION, HEREBY PROPOSE TO FURNISH TO THE BOROUGH OF HANOVER, DUCTILE IRON PIPE AND ASSOCIATED COMPACT DUCTILE IRON FITTINGS IN THE ESTIMATED QUANTITIES AND SIZES LISTED BELOW AT THE BID PRICES. ACTUAL PURCHASES MAY BE MORE OR LESS THAN THE ESTIMATED QUANTITIES INDICATED; THEREFORE, IF A MIX-SIZED ORDER OR HALF OF A TRUCK LOAD OF PIPE IS ORDERED THE UNIT PRICE AND SHIPPING PRICE WILL REMAIN THE SAME.

DUCTILE IRON PIPE

BRAND NAME	QUANTITY	SIZE	UNIT PRICE	TOTAL PRICE
_____	200'	4"	$_____	$_____
_____	4500'	6"	$_____	$_____
_____	2000'	8"	$_____	$_____
_____	500'	10"	$_____	$_____
_____	1500'	12"	$_____	$_____

TOTAL PIPE $_____

DUCTILE IRON PIPE FITTINGS

BRAND NAME	FITTINGS QUANTITY	SIZE	TYPE	ENDS	UNIT PRICE	TOTAL PRICE
_____	1	12"x12"x6"	TEE.	M.J	$_____	$_____
_____	1	12"x12"x8"	TEE	M.J	$_____	$_____
_____	1	12"x12"x10"	TEE	M.J	$_____	$_____
_____	1	12"x12"x12"	TEE	M.J	$_____	$_____
_____	1	10"x10"x8"	TEE	M.J.	$_____	$_____
_____	2	10"x10"x10"	TEE	M.J.	$_____	$_____
_____	2	6"x6"x4"	TEE	M.J.	$_____	$_____
_____	2	8"x8"x6"	TEE	M.J.	$_____	$_____
_____	2	8"x8"x8"	TEE	M.J.	$_____	$_____
_____	2	6"x6"x6"	TEE	M.J.	$_____	$_____
_____	1	12" 45°	BEND	M.J.	$_____	$_____
_____	1	12" 11¼°	BEND	M.J.	$_____	$_____
_____	2	12" 90°	BEND	M.J.	$_____	$_____
_____	2	8" 45°	BEND	M.J.	$_____	$_____
_____	1	8" 22½°	BEND	M.J.	$_____	$_____
_____	1	8" 11¼°	BEND	M.J.	$_____	$_____
_____	4	8" 90°	BEND	M.J.	$_____	$_____
_____	2	6" 90°	BEND	M.J.	$_____	$_____
_____	4	6" 45°	BEND	M.J.	$_____	$_____
_____	3	6" 11¼°	BEND	M.J.	$_____	$_____
_____	2	6" 22½°	BEND	M.J.	$_____	$_____
_____	6	4" 90°	BEND	M.J.	$_____	$_____
_____	2	4" 45°	BEND	M.J.	$_____	$_____
_____	4	10" 90°	BEND	M.J.	$_____	$_____
_____	6	10" 45°	BEND	M.J.	$_____	$_____
_____	2	10" 22½°	BEND	M.J.	$_____	$_____
_____	4	12"x12"	SOLID SLEEVE	M.J.	$_____	$_____
_____	6	10"x12"	SOLID SLEEVE	M.J.	$_____	$_____
_____	10	8"x12"	SOLID SLEEVE	M.J.	$_____	$_____
_____	10	6"x12"	SOLID SLEEVE	M.J.	$_____	$_____
_____	10	4"x12"	SOLID SLEEVE	M.J.	$_____	$_____
_____	2	12"x12"x6"	HYDRANT TEE	M.J.	$_____	$_____
_____	2	10"x10"x6"	HYDRANT TEE	M.J.	$_____	$_____
_____	3	8"x8"x6"	HYDRANT TEE	M.J.	$_____	$_____
_____	3	6"x6"x6"	HYDRANT TEE	M.J.	$_____	$_____
_____	1	8"x8"x6"x6"	CROSS	M.J.	$_____	$_____
_____	1	8"x8"x8"x8"	CROSS	M.J.	$_____	$_____
_____	2	8"x6"	REDUCER	M.J.	$_____	$_____
_____	5	4"x12"	DUAL PUR. SOLID SLEEVE	MJ	$_____	$_____
_____	5	6"x12"	DUAL PUR. SOLID SLEEVE	MJ	$_____	$_____
_____	6	4"	(2 bolt) ROMAC MACRO COUPLINGS		$_____	$_____
_____	6	6"	(2 bolt) ROMAC MACRO COUPLINGS		$_____	$_____
_____	6	8"	(2 bolt) ROMAC MACRO COUPLINGS		$_____	$_____
_____	6	10"	(2 bolt) ROMAC MACRO COUPLINGS		$_____	$_____
_____	6	12"	(2 bolt) ROMAC MACRO COUPLINGS		$_____	$_____

TOTAL FITTINGS $_____

GRAND TOTAL PIPE & FITTINGS, if awarded for both items $_____

ALL PRICES ARE FOB JOB SITE, OR PIPE YARD

IT IS UNDERSTOOD AND AGREED THAT THE BOROUGH OF HANOVER COUNCIL MAY REJECT ANY OR ALL BIDS OR MAY AWARD THE CONTRACT EITHER INDIVIDUALLY FOR PIPE OR INDIVIDUALLY FOR FITTINGS OR AS A COMBINED BID FOR PIPE AND FITTINGS AS IN THEIR SOLE JUDGEMENT WOULD BE TO THE BEST INTERESTS OF THE BOROUGH OF HANOVER.

_____

DATE

_____

TELEPHONE NUMBER / FAX NUMBEROF BIDDER

_____

NAME OF BIDDER

BY: _____

_____

ADDRESS OF BIDDER

_____

CITY AND STATE

_____

EMAIL ADDRESS OF BIDDER

SECTION I - INSTRUCTIONS TO BIDDERS

SECTION 1-1 Sealed bids will be received by Hanover Borough Council for Class 52 Ductile Iron Pipe, and associated compact Ductile Iron Fittings in estimated quantities as indicated on the bid form. ***Actual purchases may be more or less than the estimated quantities indicated,*** therefore unit prices will be utilized to purchase items as needed.

SECTION 1-2 The pipe and fittings shall be in complete compliance with the general and special requirements of this specification. All fittings to be delivered with Mag-A-lug Retainer Gland Kits.

SECTION 1-3 Gaskets and lubricant shall be included.

SECTION 1-4 ALL ITEMS SHALL BE DELIVERED TO 228 HIGH STREET, HANOVER, PA AND CHECK IN BY A WATER DEPARTMENT EMPLOYEE.

SECTION 1-5 Individual awards will be made to the lowest responsible bidder for the pipe and/or pipe fittings. Bidders will submit a bid on either pipe or fittings or both pipe and fittings. Therefore, extended total and grand totals must appear on all bids. The contract shall cover the period May 1, 2021 to May 1, 2022.

SECTION 1-6 The successful bidder shall furnish, within twenty (20) days after award of contract a standard performance bond in the principal sum of 100% of a contract price.

1-6.1 Cash, certified check, or bid bond drawn to the order of The Borough of Hanover shall accompany each proposal in an amount of not less than 10% of the total bid price, with the same tendered in good faith as bid security. Such bid security shall be returned to all except the two (2) low bidders within three (3) days following the contract award. The bid security of the two (2) low bidders shall be returned immediately upon execution by the successful bidder.

1-6.2 In the event the successful bidder fails to execute a contract and provide a performance bond as required then bid security as tendered by the successful bidder shall become the property of The Borough of Hanover to cover any loss or damage which might occur to The Borough of Hanover as a result of the failure of the successful bidder to comply with the requirements set forth herein.

SECTION 1-7 Bids must be sealed, plainly marked **"DUCTILE IRON PIPE & FITTINGS BID"**, Attention: Michael R. Bowersox, Borough Manager, The Borough of Hanover, and be in the Office of The Borough of Hanover not later than 10:00 a.m., April 12, 2021 at which time bids will be opened. Bids will be awarded Wednesday, April 28, 2021 at 7:00 PM.

SECTION 1-8 The right is reserved to reject any or all bids, to waive any informalities and to award the bid in the best interest of The Borough of Hanover. Award may be made separately on pipe and fittings or the aggregate lowest price for pipe & fittings.

SECTION 1-9 Prices as quoted shall remain firm for the duration of the contract. Any bid with an escalation clause attached shall be rejected as being informal and not meeting the intent of requirements and specifications as contained herein.

SECTION 1-10 Invoices received by the 5th of the month will be paid on or before the day following the third Wednesday of that month.

SECTION 1-11 Specific emphasis is hereby placed on Section 1-4 of "INSTRUCTIONS TO BIDDERS". Bidders shall quote F.O.B. Job Site as reference herein. Any bid with an escalation clause attached regarding truck load freight rates shall be rejected as being informal and not meeting the intent of requirements and specifications as contained herein.

SECTION II
STANDARD FOR DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL MOLDS OR SANDLINED MOLDS FOR WATER WITH PUSH-IN JOINTS

SECTION 2-1 SCOPE - This standard covers four (4) inch through twenty (20) inch Ductile Iron Pipe centrifugally in metal molds or sand lined molds for water with push-on joints.

SECTION 2-2 DEFINITIONS – Under this standard, the following definitions shall apply:

2-2.1 PURCHASER – The party entering into a contract or agreement to purchase pipe according to this standard.

2-2.2 MANUFACTURER – The party that produces the pipe.

2-2.3 DUCTILE IRON - A cast ferrous material in which a major part of the carbon content occurs as free carbon in modular or spheroidal form.

2-2.4 PUSH-ON JOINT – The single rubber-gasket joint as described in ANSI A21.11 (AWWA C111) or latest revision.

SECTION 2-3 GENERAL REQUIREMENTS

2-3.1 Pipe with push-on joints shall conform to the applicable dimensions and weights shown on the tables in AWWA STANDARD C151-76 ANSI STANDARD A21.51-1976 and to the applicable requirements of ANSI A21.11 (AWWA C111) of latest revision.

2-3.2 The nominal laying length of the pipe shall be as shown in the tables on ANSI A21.51-1976 and AWWA C151-76. A maximum of twenty (20%) percent of the total number of pipe of each size specified in an order may be furnished by as much as 24 inches shorter than the minimal laying length, and an additional ten (10%) percent may be furnished by as much as six (6) inches shorter than nominal laying length.

SECTION 2-6 WEIGHT

2-6.3 The weight of any single pipe shall not be less than the tabulated weight by more than six (6%) percent for pipe 12" or smaller in diameter, or by more than five (5%) percent for pipe larger than 12" in diameter.

SECTION 2-7 COATINGS AND LININGS

2-7.1 OUTSIDE COATING – The outside coating for use under normal conditions shall be a bituminous coating approximately 1 mil thick. The coating shall be applied to the outside of all pipe, unless otherwise specified. The finished coating shall be continuous, smooth, neither brittle when cold nor sticky when exposed to the sun, and shall be strongly adherent to the pipe.

2-7.2 CEMENT-MORTAR LININGS – Cement linings shall be in accordance with ANSI A21.4 (AWWA C104) or latest revision.

SECTIO 2-8 HYDROSTATIC TEST – Each pipe shall be subjected to a hydrostatic test of not less than 500 PSI. This test may be made either before or after the outside coating and inside coating have been applied, but shall be made before the application of such lining. The pipe shall be under the full test pressure for at least 10 S. suitable controls and recording devices shall be provided so that the test pressure and duration may be adequately ascertained. Any pipe that leaks or does not withstand the test pressure shall be rejected. In addition to the hydrostatic test, before application of a cement lining or special lining, the pipe may be retested, at the manufacturer's option after application of such lining.

SECTION 2-9 MARKING PIPE – The weight, class or nominal thickness, and casting period shall be shown on each pipe. The Manufacturer's mark, the year in which the pipe was produced, and the letters "DI" or "DUCTILE" shall be cast or stamped on the pipe. When specified on the purchase order, initials not exceeding four (4) in number shall be cast or stamped on the pipe. All required markings shall be clear and legible, and all cast marks shall be on or near the bell. All letters and numerals on pipe sizes 14 IN. and larger shall be not less than 1/2 IN. in height.

SECTION II – CONTINUED

SECTION 2-10 WEIGHING PIPE – Each pipe shall be weighed before the application of any lining or coating other than the bituminous coating and the weight shown on the outside or inside of the bell or spigot end.

SECTION 2-11 ACCEPTANCE TESTS – The Standard Acceptance Tests for the physical characteristics of the pipe shall be in accordance with Section 51-12 ANSI 21.51-1976 (AWWA C151-76).

SECTION III - SPECIAL REQUIREMENTS

SECTION 3-1.1 SIZE - Size will be as indicated on the bid form.

SECTION 3-1.2 JOINT TYPE - All joints will be push-on type. Gaskets and lubricant to be included with pipe.

SECTION 3-1.3 CLASS – Size shall be Class 52.

SECTION 3-1.4 LAYING LENGTHS – Shall be eighteen (18) or twenty (20) feet.

SECTION 3-2 SPECIAL REQUIREMENTS FOR PUSH-ON JOINTS

3-2.1 DRAWINGS – The manufacturer shall furnish drawings of the joint and gasket.

3-2.2 DIMENSIONS AND TOLERANCES – The dimensions of the bell, socket, and plain end shall be in accordance with the manufacturer's standard design dimensions and tolerances. Such dimensions shall be gauged at sufficiently frequent intervals to ensure dimensional control.

3-2.3 GASKETS – Gasket dimensions shall be in accordance with the manufacturer's standard design dimensions and tolerances. The gasket shall be of such size and shape to provide an adequate compressive force against the plain end and socket after assembly to effect a positive seal under all combinations of joint and gasket tolerances. The trade name or trademark, size, mold number, gasket and manufacturer's mark and year of manufacture shall be molded on gaskets. Markings shall not be on the sealing surfaces.

3-2.3.1 Gaskets shall be vulcanized natural or vulcanized synthetic rubber. No reclaimed rubber shall be used. When two hardnesses or rubber are included in a gasket, the soft and hard portions shall be integrally molded and joined in a strong vulcanized bond. Gaskets shall be free of porous areas, foreign material, and visible defects.

3-2.3.2 The required properties of the gasket rubber and the required method of test are listed in ANSI/AWWA C111/A21.11-80.

3-2.3.3 Quality control procedures shall be utilized to ensure that the gaskets meet the requirements of this standard. The manufacturer shall retain monthly reports of representative results from quality control tests for gaskets manufactured that month.

3-2.4 LUBRICANT – The lubricant shall be suitable for lubricating the parts of the joint for assembly. The lubricant shall be nontoxic, shall not support the growth of bacteria, and shall have no deteriorating effects on the gasket material. It shall not impair taste or odor to water in a pipe that has been flushed in accordance with AWWA C601, "STANDARD FOR DISINFECTING WATER MAINS". The lubricant containers shall be labeled with the trade name or trademark and the pipe manufacturer's name.

3-2.5 MARKING – Pipe and fittings having push-on joints shall be marked with the proprietary name or trademark of the joint.

SECTION 3-3 PERFORMANCE REQUIREMENTS OF THE PUSH-ON JOINT – The manufacturer shall have qualified the design of his joint by having performed the tests described in SECTION 11-8 ANSI/AWWA C111/A21.11-9 and shall possess records to show the results of those tests.

SECTION 3-4 CEMENT MORTAR LININGS - Cement mortar linings are required and shall conform to ANSI/AWWA C104/A21.4-80.

3-4.1 THICKNESS OF LINING – Double thickness. Linings shall not be less than 1/8 Inch for Size 4" - 12" Pipe.

3-4.2 SEAL COAT – The cement lining shall be given a seal coat of asphalic material in accordance with ANSI/AWWA C104/A21.4-80 SECTION 4.12.

3-4.2.1 Other seal coat materials may be used, the type must be noted on the bid form, and agreed upon by the Borough of Hanover.

SECTION 3-5 Written Transcripts of foundry tests shall be furnished with each load delivered.

3-5.1 The tests shall be conducted and recorded in accordance with ANSI 21.51-1976 (AWWA C151-76).

3-5.2 All pipe to be American made as per the "Steel Products Procurement Act".

SECTION IV
GENERAL REQUIREMENTS FOR DUCTILE IRON COMPACT FITTINGS

SECTION 4-1 The following definitions apply:

4-1.1 MECHANICAL JOINT - A bolted joint of the stuffing box type as detailed in TABLE 10.1 ANSI/AWWA C110/A21.10-87 and as described in ANSI A21.11 (AWWA C111) of latest revision.

4-1.2 FLANGE JOINT – The flanged and bolted joint as detailed in TABLE 10.14 in ANSI/AWWA C110/A21.10-87.

4-1.3 DUCTILE IRON – The cast ferrous material in which the free graphite present is in a spheroidal form.

SECTION 4-2 GENERAL REQUIREMENTS

4-2.1 Fittings with mechanical joints and flange joints shall conform to the dimensions and weights shown in the tables in this standard, unless otherwise agreed upon at the time of purchase. The mechanical joint shall also conform in all respects to ANSI A21.11 (AWWA C111) of latest revision. Unless otherwise specified, the mechanical joint gland shall be ductile iron in Mag-a-lug retainer gland kits.

4-2.2 Fittings shall be cast from ductile iron, as shown in the tables. All fittings shall be capable of withstanding without bursting, hydrostatic tests of three (3) times the rated water working pressure.

4-2.3 Standard fittings shall be furnished with end combinations shown in the Tables of ANSI/AWWA C110-77. When fittings of other designs or dimensions are purchased under this standard, it is the obligation of the purchaser to supply with each order specific details for each size, pressure rating, or type of fitting.

SECTION 4-3 INSPECTION & CERTIFICATION BY MANUFACTURER

4-3.1 The manufacturer shall establish the necessary quality control and inspection practice to ensure compliance with this standard. All fittings shall be clean and sound without defects that could impair their service.

4-3.2 Repairing of defects by welding or other methods shall not be allowed if such repairs could adversely affect the serviceability of the fitting or its capability to meet strength requirements of this standard.

4-3.3 The manufacturer shall furnish a sworn statement that the inspection and all the specified tests have been made and the results thereof comply with the requirements of this standard.

SECTION 4-4 DELIVERY AND ACCEPTANCE

All fittings and accessories shall comply with this standard. Fittings or accessories that do not comply with this standard shall be replaced by the manufacturer at the agreed point of delivery.

SECTION 4-5 Tolerance or permitted variances shall be in accordance with SECTION 10-8 ANSI/AWWA C110-87.

SECTION 4-6 Coatings and linings shall comply with SECTION 2-7 and SECTION 3-4 of this specification.

SECTION 4-7 Markings of fittings shall comply with SECTION 10-10 ANSI/AWWA C110-77.

SECTION 4-8 Acceptance tests shall be in accordance with SECTION 10-11 ANSI/AWWA C110-77.

SECTION V
SPECIAL REQUIREMENTS FOR FITTINGS

SECTION 5-1 SIZE

5-1.1 Fittings shall be sized in accordance with those sizes listed on the bid form.

5-1.2 All joints to be mechanical joints rates for 350 PSI working pressure on Ductile Iron.

SECTION 5-2 ALL FITTINGS SHALL BE DUCTILE IRON AS INDICATED ON THE BID FORM.

SECTION 5-3 END COMBINATIONS ARE IDENTIFIED ON THE BID FORM.

SECTION 5-4 LININGS AND COATINGS SHALL CONFORM TO SECTION 2-7 AND SECTION 3-4 OF THIS SPECIFICATION.

SECTION 5-5 ALL MECHANICAL JOINT FITTINGS TO INCLUDE MAG-A-LUG GLANDS, GASKETS, BOLTS & NUTS, AND LUBRICANT.

SECTION 5-6 ALL FITTINGS TO BE AMERICAN MADE AS PER THE "STEEL PRODUCTS PROCUREMENT ACT".